Hypnum, very successfully show characteristic features of these forms in growth. The technical illustrations are clear and very well represented.

Dr. Howe's treatment of Hepaticae has also a wealth of illustrations including many halftone pictures as well as line drawings. An illustrated glossary of special bryological terms is a valuable feature both for the individual student who wants to become acquainted with some of the native Hepatics and for class work.

R. C. Benedict

## THE NATIVE FLORA OF THE VICINITY OF COLD SPRING HARBOR, L. I., N. Y.\*

This work should be of great interest and value to any botanist who may wish to study the plants of the Cold Spring Harbor (N. Y.) region, as either a systematist or an ecologist. Preliminary chapters on the geology, soils and climate of Long Island, which are written with special reference to the region around Cold Spring Harbor, serve as a background for the understanding of the floristic characteristics to which they give rise. The great variety of habitats found in morainic ridges, alluvial plains, prairies, bogs, salt meadows, estuaries of all degrees of salinity, lagoons, littoral dunes and boulder strewn beaches affords an unusually large number of ecological types for so limited an area.

The list of species, which constitutes the major portion of the work, is particularly broad in scope, although the author does not claim completeness, especially in the lower divisions of the thallophytes. "Die Natürliche Pflanzenfamilien" and the "Syllabus der Pflanzenfamilien" (1919) form the basis for the taxonomic sequence of the cryptograms, (exclusive of Pteridophytes), used in this paper, while the arrangement of Britton and Brown's "Illustrated Flora" is followed for the Pteridophytes and seed plants. The list includes 1865 species of living plants, belonging to 991 genera and ranging from the bacteria to the composites. With a few exceptions among the lowest forms, the author gives

<sup>\*</sup> Grier, N. M.—The Native Flora of the Vicinity of Cold Spring Harbor, L. I., N. Y. The American Midland Naturalist, IX, Nov., Jan., May, July and Sept., 1924-25.

the localities in which each species is to be found. In addition to the living plants, the work includes a list of 213 species of fossils, mostly of Cretaceous age, which have been unearthed on Long Island. Following this, a section is devoted to the insect galls of the region, of which 95 are included. An extensive bibliography of works dealing with the flora of Long Island and vicinity completes this very comprehensive guide.

ALEXANDER F. SKUTCH

## PROCEEDINGS OF THE CLUB

## MEETING OF DECEMBER 8, 1925

This meeting was held at the American Museum of Natural History. The following were elected to membership in the Club: Mr. Frank W. Johnson, 1362 Amherst Street, Buffalo, N. Y. Miss Katherine W. Browne, Barnard College, New York City. Professor Richards addressed the Club on "Some features of the desert vegetation of Southern Arizona.

A series of lantern slides, illustrating the region around Tucson, were shown with running comment by the speaker.

Geographically there are in this region the mountain ranges running up sometimes to as much as 9,000 feet, the bajadas or foothills, and the mesa-like slopes which fall off gradually to the flood plains of the water courses.

There are two rainy seasons in this part of Arizona, together averaging 10–12 inches: the winter rains, which are light, beginning in the middle of November and lasting until the end of March; the summer rains consisting of few storms, often of great violence, lasting through July and early August.

Three vegetational regions may be considered, corresponding in a general way to the geographical features.

- 1. The montane region, where the flora is not xerophytic in the strictest sense, for the precipitation is relatively greater here than at lower altitudes. At the higher elevations, species of pine, juniper, live oaks and other arboreal forms are characteristic.
- 2. The flood plain region, with its cottonwoods and mesquite, is even less typically xerophytic, since the level of the ground water is here well within the reach of the roots of such forms.